

PATENT ABSTRACTS OF JAPAN

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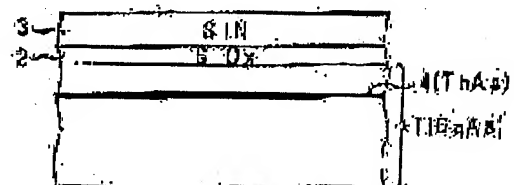
HARADA YASUO

(54) DOPING METHOD

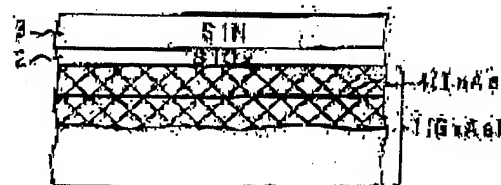
(57)Abstract:

PROBLEM TO BE SOLVED: To provide a method of doping a compd. semiconductor easily at a high controllability.

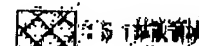
SOLUTION: After forming a nondoped SiO_x film (x<2) 2 and an SiN film 3 on a GaAs substrate 1 having one or more InAs layers 4 inside, it is heat treated to diffuse Ga atoms in the GaAs substrate 1 into the SiO_x film 2 as the temp. rises, thereby forming Ga holes in the substrate 1, into which Si atoms of this film 2 are diffused as the result. The exchange of Ga atoms with Si atoms expands to the depth of the substrate 1 to form an n-type Si diffused region.



(a)



(b)



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